



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/437,560	11/10/1999	DAVID J. KURLANDER	662005.469C1	8160

27195 7590 01/14/2005

AMIN & TUROCY, LLP  
24TH FLOOR, NATIONAL CITY CENTER  
1900 EAST NINTH STREET  
CLEVELAND, OH 44114

EXAMINER

PILLAI, NAMITHA

ART UNIT	PAPER NUMBER
----------	--------------

2173

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/437,560

Applicant(s)

KURLANDER ET AL.

Examiner

Namitha Pillai

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 14-22 and 26-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-22 and 26-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 14-22 and 26-48 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by U. S. Patent No. 5, 867, 175 (Katzenberger et al.), herein referred to as Katzenberger.

Referring to claim 14, Katzenberger discloses a data processing system including a display device and a processing means for running an application program (Figure 1), the application program having a user interface with a plurality of User Interface Output States (UIOSes) and a plurality of operators, each operator for transforming a currently displayed UIOS to a displayed next UIOS (column 2, line 22-33). Katzenberger discloses providing a user interface output system for controlling the generation of a user interface output sequence (column 2, lines 14-19). Katzenberger discloses providing a specification identifying a plurality of goal UIOSes for the user interface output system to establish and identifying the plurality of operators, each of the operators having at least one precondition to be satisfied before the operator can be performed (column 7, lines 51-65), wherein the various output states, are the goal UIOSes based on the user's selections. Katzenberger also discloses providing a compiler, for compiling the specification which results in a user interface output controller distinct from the application program, the user interface including a plurality of plans, each of the plans having

Art Unit: 2173

a series of operators (Figure 2 and column 10, lines 4-13), a start UIOS and one of the goal UIOSes, the series of operators for transforming the start UIOS to at least one intermediate UIOS to the goal UIOS, the operators in the series such that the preconditions of each of the operators in the series are satisfied after performance of earlier operators in the series (column 14, lines 45-55). Katzenberger discloses while the application program is running on the processing means providing the user interface output controller with an event received from the application program, the event identifying one of the goal UIOSes, determining a currently displayed UIOS, retrieving one of the plurality plans such that the start UIOS of the retrieved plan is the currently displayed UIOS and the goal UIOS of the retrieved plan is the goal UIOS identified by the event (column 10, lines 4-13 and column 14, lines 45-55 ). Katzenberger discloses performing the series of operators provided by the retrieved plan to display the start UIOS followed by the at least one intermediate UIOS followed by the goal UIOS (column 14, lines 45-55).

Referring to claim 15, Katzenberger discloses providing events which may be specified by the application program and for which the user interface output system provides user interface output sequences (column 7, lines 51-65). Katzenberger discloses providing state variables that define attributes of each user interface output state and providing operators that identify actions, which are used to modify the attributes of each user interface output state (column 16, lines 33-53).

Referring to claims 16, 27, 30, 40, 41, 45 and 46, Katzenberger discloses including timing directives, which determine the time at which an action is performed (column 14, lines 31-34).

Referring to claim 17, Katzenberger discloses providing state class definitions, which are hierarchical groupings of state variables (column 6, lines 29-33).

Referring to claim 18, Katzenberger discloses providing autonomous action sequences identifying actions which are performed by the user interface output system when a current user interface output state contains predefined values for conditions which capture attributes of the current user interface output state (column 14, lines 45-55).

Referring to claim 19, Katzenberger discloses applying a planning methodology to generate each of the plans (column 2, lines 12-15).

Referring to claim 20, Katzenberger discloses applying a planning methodology to generate each of the plans, including selecting each of the plurality of goal UIOSes (column 6, lines 50-65). Katzenberger discloses for each selected goal UIOS, selecting each of the plurality of operators, performing an inverse of the selected operator on the selected goal UIOS and when the operators transforms the selected goal UIOS into a new UIOS, storing the new UIOS along with the selected operator (column 16, lines 25-65).

Referring to claim 21, Katzenberger discloses the new UIOS is identified as an intermediate UIOS and is then processed as a goal UIOS (column 14, lines 45-55).

Referring to claim 22, Katzenberger discloses a data processing system with a display device and processing means for running an application program (Figure 1). Katzenberger discloses providing a compiled user interface output controller, which generates a user interface output sequence, the user interface output controller distinct from the application program (Figure 2 and column 10, lines 4-13), the user interface output sequence including a first user interface output state and a second user interface output state, the first user interface output state

Art Unit: 2173

and the second user interface output state each including a set of conditions representing values which capture attributes of that user interface output state (column 14, lines 45-55).

Katzenberger discloses under the control of the user interface output controller, receiving operators from the application program, each operator having a precondition consisting of one of the conditions in the set, and a required value for the condition such that the operator can only be performed when a current user interface output state satisfies the precondition by including the condition representing the required value (column 10, lines 4-13 and column 14, lines 45-55).

Katzenberger discloses after receiving the operators, receiving an event from the application program specifying a goal to be achieved by the user interface output sequence and upon receiving the event from the application program, determining conditions which temporally precede the event and establishing the determined conditions which precede the event (column 10, lines 4-13). Katzenberger also discloses performing a plurality of the received operators to transform the first user interface output state into the second user interface output state, which establishes the event, the plurality such that a first operator of the plurality has a precondition which is satisfied by a current user interface output state and wherein after the performance of each operator in the plurality resulting UIOS satisfies the precondition for the operator next in the plurality, determining conditions which temporally follow the event and establishing the determined conditions which follow the event, the conditions being stated to transition from state to state through conditions statements (column 14, lines 45-55).

Referring to claim 26, Katzenberger discloses a data processing system with a display device for displaying a sequence of a plurality of user interface output states (column 3, lines 34-37). Katzenberger also discloses a processing means for running an application program (Figure

Art Unit: 2173

1) and for providing a user interface output system for controlling the generation of the sequence (column 2, lines 12-15). Katzenberger discloses a means for identifying goal UIOSes for the user interface output system to establish and identify a plurality of operators, each operator for transforming one UIOS to another UIOS such that a precondition of the operator is established by the one UIOS and such that a post condition of the operator is established in another UIOS (column 14, lines 45-55). Katzenberger also discloses a means for compiling the specification to generate a user interface output controller distinct from the application program (Figure 2 and column 10, lines 4-13). Katzenberger discloses storing the user interface output controller in memory (Figure 2), and receiving an event from the application program, the event identifying one of the goal UIOSes (column 12, lines 2-7 and lines 22-28). Katzenberger also discloses means for determining the current UIOS in the sequence and the series of operators which transform the determined current UIOS into the identified one of the goal UIOS (column 14, lines 45-55). Katzenberger also discloses performing the series of operators to display the sequence on the display device to transform the determined current UIOS into at least one intermediate UIOS and then into the identified one of the goal UIOSes (column 14, lines 45-55).

Referring to claims 28 and 31, Katzenberger discloses using this timing specification to transition, wherein this transition process allows for the timing information to be incorporated into the sequence (column 16, 45-50).

Referring to claim 29, Katzenberger discloses a user interface output system for controlling generation of a user interface output sequence by identifying goal user interface output states, which identify user interface output states for the user interface output system to establish and for identifying operators which specify actions to be performed by the user

interface output sequence each of the operators having at least one precondition to be satisfied before the operator can be executed (column 7, lines 55-65). Katzenberger also discloses a means for compiling the specification to generate a user interface output controller distinct from the application program (Figure 2 and column 10, lines 4-13). Katzenberger discloses storing the user interface output controller in memory (column 9, lines 18-20), and receiving an event from the application program, the event identifying one of the goal user interface output states (column 12, lines 2-7 and lines 22-28). Katzenberger also discloses means for determining the current UIOS in the sequence and the series of operators which transform the determined current UIOS into the identified one of the goal UIOS (column 13, lines 23-27). Katzenberger also discloses performing the series of operators to display the sequence on the display device to transform the determined current UIOS into at least one intermediate UIOS and then into the identified one of the goal UIOSes (column 14, lines 45-55). Katzenberger discloses that identifying that preconditions of the next operator are satisfied after execution of the current operator, other than a last operator (column 14, lines 45-55). Katzenberger discloses a means for executing the sequence of operators to transform the determined current user interface output state into the at least one intermediate user interface output state and then into the identified one of the goal user interface output states so as to display the sequence of operators on a display device, the operators being displayed through user interaction (column 14, lines 45-55).

Referring to claim 32, Katzenberger discloses a user interface output controller for generating a user interface output sequence, the compiled user interface output controller distinct from an application program (Figure 2 and column 10, lines 4-13). Katzenberger discloses receiving an event from the application program, the event identifying one of the goal user



Art Unit: 2173

interface output sequence by displaying a series of a plurality of user interface output states (column 14, lines 45-55). Katzenberger discloses generating the user interface output sequence for achieving the goal user interface output sequence including a plurality of operators which trigger the execution and based on whether predefined conditions are true will display the plurality of user interface output states (column 14, lines 45-55). Katzenberger also discloses that as the plurality of operators are executed and predefined set of conditions are true, so as to display the series of the plurality of user interface output states on a display device (column 14, lines 45-55).

Referring to claim 33, Katzenberger discloses a data processing system including a display device and a processing means running an application program, having a user interface (Figure 1) with a current User Interface Output State (UIOS) displayed on the display device (column 16, lines 28-31). Katzenberger discloses providing a compiled user interface output controller for displaying the user interface, the user interface output controller distinct from the application program (Figure 2 and column 10, lines 4-13). Katzenberger discloses that under the control of the application program, without knowledge of the current UIOS displayed on the display device, determining a goal UIOS to be displayed on the display device (column 10, lines 3-6). Katzenberger discloses sending to the user interface output controller an indication of the goal UIOS and under control of the user interface output controller, receiving from the application of the indication of the goal UIOS (column 10, lines 3-6). Katzenberger discloses determining the current UIOS and determining a sequence of a plurality of operators based on the determined current UIOS and the goal UIOS (column 14, lines 45-55). Katzenberger discloses that for each of the operators in sequence, performing the operator to transition the user

Art Unit: 2173

interface from the current UIOS to a different resulting UIOS, the performing such that the resulting UIOS is displayed on the display device and becomes the current UIOS and such that the current UIOS after all the operators are performed is the goal UIOS (column 14, lines 45-55), the sequence such that the preconditions for a first operator in the sequence are currently established and such that the preconditions for all other operators in the sequence are established after execution of earlier operators in the sequence (column 14, lines 45-55). Katzenberger also discloses that the application program specifies the goal UIOS without knowledge of the current UIOS, and in response the user interface output controller determines a sequence of operators that when performed transition the user interface from the current UIOS through at least one displayed intermediate UIOS to the displayed goal UIOS (column 14, lines 45-55).

Referring to claim 34, Katzenberger discloses that the determined sequence of the plurality of operators is generated after receiving of the indication of the goal UIOS (column 14, lines 45-50).

Referring to claim 35, Katzenberger discloses that each UIOS has a value for each of a plurality of UIOS variables, wherein each operator has a precondition of a UIOS variable and a required value for the UIOS variable, wherein an operator having a precondition of a first variable and a first value can only be performed when the current UIOS satisfies the operator precondition by having a value for the first variable that is equal to the first value, wherein the determined sequence begins with a first operator whose precondition is satisfied by the determined current UIOS, and wherein after the performance of each operator in the determined sequence, the resulting UIOS satisfies the precondition for the operator next in the determined sequence (column 16, lines 25-65).

Referring to claim 36, Katzenberger discloses identifying the UIOS variable whose value in the goal UIOS is different than in the current UIOS (column 16, lines 31-33). Katzenberger discloses selecting a last operator such that the resulting UIOS from performing the last operator has a value for the identified UIOS variable that is equal to the value for the identified UIOS variable in the goal UIOS (column 16, lines 45-50). Katzenberger discloses selecting an initial operator such that the resulting UIOS from performing the initial operator satisfies the precondition of the last operator (column 16, lines 55-65). Katzenberger discloses until the current UIOS satisfies the precondition of the initial operator, repeatedly performing the steps of designating the initial operator to be an intermediary operator and selecting an initial operator such that the resulting UIOS from performing the initial operator satisfies the precondition of the operator most recently designated to be the intermediary operator, determining the plurality of operators to be selected operators and determining the sequence of the plurality of operators to be a reverse of the selection order (column 14, lines 45-55).

Referring to claim 37, Katzenberger discloses a method for displaying user interface information for a plurality of application programs each having a distinct user interface and an operator set consisting of a plurality of operators (Figure 1). Katzenberger discloses the operators having at least one precondition, which must be established before the operator can be performed (column 16, lines 35-40). Katzenberger also discloses providing a compiled user interface output controller distinct from the application programs (Figure 2 and column 10, lines 4-13). Katzenberger discloses under control of the user interface output controller and for each of the programs through which this controller can be applied to, receiving from the application program the operator set for the application program (column 10, lines 4-7). Katzenberger

Art Unit: 2173

discloses after receiving the operator set, receiving from the application program a plurality of user interface goals, each user interface goal reflecting information to be displayed in the user interface for the application program (column 7, lines 50-65). Katzenberger discloses that for each user interface goal, achieving the user interface goal by determining the information currently displayed in the user interface for the application program and after receiving the user interface goal, determining a series of operators from the operator set for the application program that will transition the user interface for the application program from displaying the determined information to displaying the information reflected by the user interface goal (column 14, lines 45-55), the series such that the preconditions for a fast operator in the series are currently established and such that the preconditions for all other operators in the series are established after execution of earlier operators in the series (column 16, lines 35-40). Katzenberger discloses that executing the determined series of operators in sequence such that the information reflected by the user interface goal is displayed when executing is complete (column 14, lines 45-55). Katzenberger also discloses executing user interface output controller can receive a set of operators and a plurality of user interface goals from each of the plurality of application programs, and can determine for each user interface goal the series of operators from the operator set for the application program that when execute in sequence will achieve the user interface goal (column 10, lines 3-14 and Figure 2).

Referring to claims 38 and 48, Katzenberger discloses a system that generates a user interface output controller (column 2, lines 21-27). Katzenberger also discloses a compiler that compiles one or more specifications regarding a plurality of goal UIOSes, that compiles or creates the goal UIOSes from the specifications provided (column 3, lines 22-34). Katzenberger

discloses a compiled user interface output controller, generated by the compiler, that is distinct from an application program (Figure 2 and column 10, lines 4-13).

Referring to claim 39, Katzenberger discloses an input component to receive an event from the application program, the event identifies one or more goal user- interface output states (column 10, lines 4-8). Katzenberger discloses a first determiner that determines a current user interface output state in a user interface output sequence (column 10, lines 4-8). Katzenberger also discloses a second determiner that determines a sequence of operators which transform the determined current user interface output state into at least one intermediate user interface output state and then into the identified goal user interface output state (column 10, lines 7-14).

Katzenberger also discloses a sequencer that comprises a sequence of operators that after execution of each operator in sequence other than the last operator, the precondition of a next operator in the sequence is satisfied (column 14, lines 45-55). Katzenberger also discloses an executor that executes the sequence of operators to transform the determined current user interface output state into the at least one intermediate user interface output state and then into the identified goal user interface output state so as to display the sequence of operators on a display device (column 14, lines 45-55).

Referring to claims 42 and 47, Katzenberger discloses that the compiled user interface output controller is stored in memory (Figures 1 and 2).

Referring to claim 43, Katzenberger discloses a method for generating a user interface output controller for retrieving, at least one specification identifying at least one goal user interface output state for the user interface output controller (column 14, lines 45-55).

Katzenberger also discloses establishing, the at least one specification further comprising at least

Art Unit: 2173

one operator for specifying actions to be performed by the compiled user interface output controller, each operator having least one precondition to be satisfied before the operator can be executed (column 14, lines 45-55). Katzenberger also discloses compiling, the at least one specification to create a user interface output controller distinct from an application program (Figure 2 and column 10, lines 4-13).

***Response to Arguments***

2. In view of the arguments presented on the Appeal Brief filed on 10/6/04, PROSECUTION IS HEREBY REOPENED. Reasons set forth below.

With respect to Applicant's arguments, it has been determined that the prior rejection with U. S. Patent No. 5, 801, 687 (Peterson et al.), wherein Peterson discloses a state machine that represents the user interface controller that is responsible for displayed the user output states, wherein Peterson does not further explicitly state a distinction between a user interface controller and an application program, wherein the compiled user interface controller is part of the application program and therefore is not distinct from it. The current rejection has relied on Katzenberger, wherein Katzenberger discloses displayed a plurality of user interface output states, the states displayed through animation, wherein the user interface controller represented as a script is generated or compiled by a script generator wherein both the script and said generator is distinct from the application program.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

Art Unit: 2173

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

### ***Conclusion***

3. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach the method for displaying user output states.

Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington D.C. 20231. If applicant desires to fax a response, central FAX number (703) 872-9306 may be used. NOTE: A Request for Continuation (Rule 60 or 62) cannot be faxed.

Please label "PROPOSED" or "DRAFT" for informal facsimile communications. For after final responses, please label "AFTER FINAL" or "EXPEDITED PROCEDURE" on the document. Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Namitha Pillai whose telephone number is (571) 272-4054. The examiner can normally be reached on 8:30 AM - 5:30 PM.

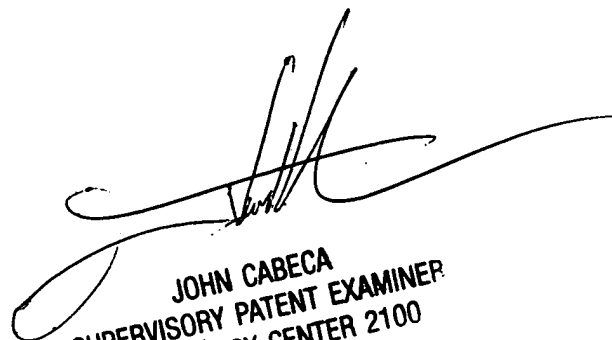
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571) 272-4048.

Art Unit: 2173

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800.

Namitha Pillai  
Assistant Examiner  
Art Unit 2173  
January 9, 2005



JOHN CABECA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100